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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,342	03/16/2001	Robert H. Wills	10964-037002 / Case 664	7728

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EXAMINER

KIM, PAUL L

ART UNIT PAPER NUMBER

2857

DATE MAILED: 08/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/811,342

Applicant(s)

WILLS, ROBERT H.

Examiner

Paul L Kim

Art Unit

2857

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 21-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 42-45 is/are allowed.
- 6) ☒ Claim(s) 21,22,24-26,29-33,35-39 and 41 is/are rejected.
- 7) ☒ Claim(s) 23,27,28,34 and 40 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 21, 22, 24-26, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hedman et al.

With regard to claim 21, Hedman et al teaches a system for controlling power comprising: a detector to detect a characteristic of power on a network (col. 2, lines 29-31), an accelerator to provide an accelerating response function (col. 10, lines 60-65), and a circuitry to control the power supplied to the network based on the accelerating response function, the circuitry comprising a power converter (col. 2, lines 31-35).

With regard to claims 22, 24 and 26, Hedman et al teaches the detector comprising a voltage detector (col. 6, lines 9-15) and a frequency detector (col. 5, lines 50-54), the circuitry controlling the power supplied to the utility network based on outputs on both the frequency and voltage (col. 6, lines 9+).

With regard to claims 25, Hedman et al teaches the circuitry controlling the power by changing a voltage on the grid line in a same direction as the change (col. 6, lines 9-15).

With regard to claim 29, Hedman et al teaches a power source supplying power to the network (fig. 1, part 11).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 30-33, 35-39, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peckinpaugh in view of Hedman et al.

With regard to claims 30, 35, 36, and 41, Peckinpaugh teaches a method and apparatus of controlling power supplied to a utility network comprising: detecting a trend in voltage on the utility network (col. 2, lines 23-25) and controlling a power converter which supplies to the utility network in accordance with the trend (col. 2, lines 25-27 and col. 3, lines 60-64).

Peckinpaugh, however, does not specify providing an accelerating response function to the trend. Hedman et al teaches providing an accelerating response function in response to a change in characteristic of power on a grid (col. 10, lines 60-65). Since Peckinpaugh and Hedman et al are both within the art of controlling a utility network in response to power characteristic changes, it would have been obvious to one of ordinary skill in the art, to modify

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Peckinpaugh, so that an accelerating response is provided, as taught by Hedman, so as to provide a faster response for increased energy needs.

With regard to claims 31 and 37, Peckinpaugh teaches the trend comprising a change in voltage on the utility network (col. 2, lines 43-46).

With regard to claims 32 and 38, Peckinpaugh teaches controlling comprising changing a supply of voltage to the utility network in a same direction as the change in voltage on the utility network (col. 2, lines 36-38).

With regard to claims 33 and 39, Peckinpaugh teaches the change in voltage comprising at least a change in voltage level and a change in voltage frequency (fig. 5).

#### ***Allowable Subject Matter***

5. Claims 42-45 are allowed.

Claims 23, 27, 28, 34, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 21-41 have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

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7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jindrick et al teaches a method of voltage and current regulating based on microprocessor control.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 703-305-7468. The examiner can normally be reached on Monday-Thursdays 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-4440 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK  
August 10, 2003

  
MARC S. HOFF  
SUPERVISORY PATENT EXAMINER  
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